

NEW TEST

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Hemoglobin Evaluation by HPLC and Electrophoresis With Reflex to RBC Solubility

3020911, HGBEL PLUS

Specimen Requirements:

Patient Preparation:

Collect: Lavender (EDTA) or pink (K2EDTA).

Specimen Preparation: Transport 5 mL whole blood in original tube (Min: 0.5 mL). Also acceptable: whole blood in an ARUP standard transport tube.

Transport Temperature: Refrigerated

Unacceptable Conditions: Frozen or room temperature specimens.

Remarks:

Stability: Ambient: Unacceptable; Refrigerated: 1 week; Frozen: Unacceptable

Methodology: High Performance Liquid Chromatography (HPLC) / Capillary Electrophoresis / RBC Solubility

Note:

HPLC and capillary electrophoresis are performed on all samples. If a hemoglobin variant cannot be quantitated by HPLC, results from capillary electrophoresis will be reported.

If abnormal peaks suggestive of a sickling hemoglobin variant are detected, then RBC solubility will be performed. Additional charges apply.

CPT Codes: 83021; 83020; if reflexed, add 85660

New York DOH Approval Status: This test is New York DOH approved.

Interpretive Data:

Hemoglobin Evaluation:

HPLC Report: Results from HPLC are reported. Results were confirmed by capillary electrophoresis.

See CE Report: Results from capillary electrophoresis are reported under Hemoglobin Evaluation by Capillary Electrophoresis (3017102). Results were confirmed by HPLC.

Sickle Cell Solubility Reflex:

Not Performed: Solubility testing for hemoglobin S not indicated.

Positive: Positive for hemoglobin S by HPLC and confirmed by solubility testing.

Conf Previous: Positive for hemoglobin S by HPLC. Solubility testing performed previously and not repeated with this submission.

Reference Interval:

Test Number	Components	Reference Interval	
	Hemoglobin A		
		Age	Reference Intervals (%)
		0-1 months	7.6-54.8
		2 months	14.7-70.1
		3 months	26.6-81.8
		4 months	43.0-89.5
		5 months	60.8-94.0
		6-8 months	78.2-96.6
		9-12 months	86.1-97.2
		13-23 months	85.1-97.7
		2 years and older	95.0-97.9
	Hemoglobin A2		
		Age	Reference Intervals (%)
		0-1 months	0.0-1.4
		2 months	0.0-2.0
		3 months	0.1-2.6
		4 months	0.8-3.0
		5 months	1.5-3.3
		6-8 months	1.8-3.5
		9-23 months	1.9-3.5
		2 years and older	2.0-3.5
	Hemoglobin C	0.0	
	Hemoglobin E	0.0	
	Hemoglobin F		
		Age	Reference Intervals (%)
		0-1 months	45.8-91.7
		2 months	32.7-85.2
		3 months	14.5-73.7
		4 months	4.2-56.9
		5 months	1.0-38.1
		6-8 months	0.9-19.4
		9-12 months	0.6-11.6
		13-23 months	0.0-8.5

		2 years and older	0.0-2.1
	Hemoglobin Other	0.0	
	Hemoglobin S	0.0	

HOTLINE NOTE: Refer to the Hotline Test Mix for interface build information.